

CANADA AT WAR



ST. LAWRENCE DEFENCES.....	3
<i>Civilians Join in U-Boat Dragnet</i>	
BENEFITS FOR SERVICEMEN.....	5
<i>Provisions for Post-Discharge Period</i>	
TRADE MIRRORS WAR.....	8
<i>Canada Becomes Third Trading Nation</i>	
FACTS AND FIGURES.....	10
<i>A Summary of Canada's War Record</i>	
JUNE HIGHLIGHTS.....	60
<i>A Chronology of Events at Home</i>	
INDEX.....	62
CANADA	63
<i>Basic Reference Information on the Nation</i>	

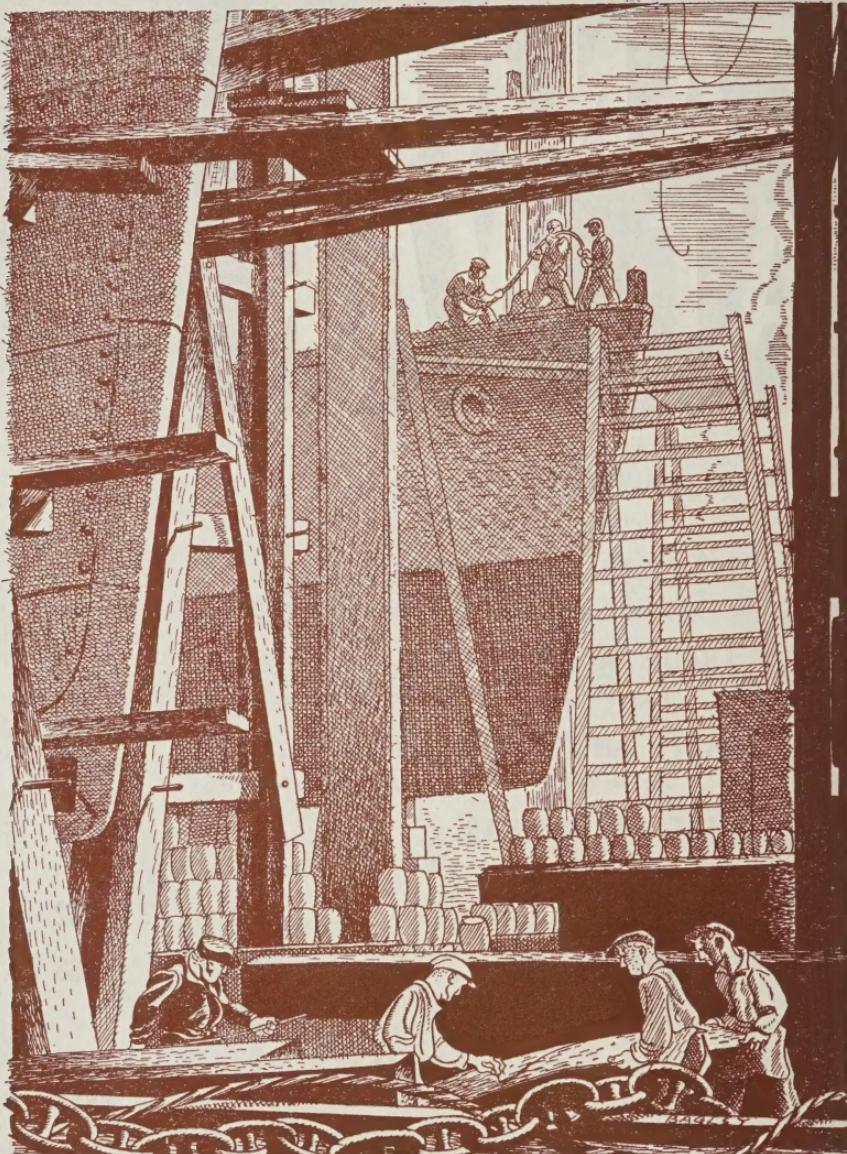
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*CANADA AT WAR is a factual, monthly reference booklet
of basic information on Canadian war activities.
This issue replaces all previous numbers.*





CANADA'S NEW WARSHIPS

*Frigates, more than 300 feet in length, are bigger, faster
and more heavily armed than corvettes.*

St. Lawrence Defences



CANADIANS along the Lower St. Lawrence River and Gulf are on the alert to meet any possible Axis lunges by sea or air. An important artery of war transportation, the St. Lawrence is open for shipping to Montreal during the summer. Last year U-boats penetrated the Gulf of St. Lawrence and the lower reaches of the river and sank 20 allied ships.

In tightening St. Lawrence defences against air and sea attack, Squadron Leader Jean Paul Desloges, R.C.A.F., has been appointed defence co-ordination officer for the Gaspe and Lower St. Lawrence area. He will act as liaison officer between the armed services and the civilian defence organizations and will co-ordinate civilian defence activities. Squadron Leader Desloges' appointment was made on

the recommendation of the three chiefs of staff. The civilian organizations involved are the Quebec Civilian Protection Committee (A.R.P.), the Royal Canadian Mounted Police, the Quebec Provincial Police and the Aircraft Detection Corps, the last a civilian group organized by the R.C.A.F. and working closely with it.

The new service-civilian organization will be operative against any type of enemy action, but is designed primarily to counteract German U-boat activities in the St. Lawrence River and Gulf.

Thousands of new members are being taken into the civilian organization, and specialized instruction in submarine detection and aircraft identification is being given to the residents of every town, village and hamlet

of the Gaspe and lower St. Lawrence region. Included as well are farmers, fishermen and lumbermen. Four mobile instruction units are already at work.

The Aircraft Detection Corps is being trained in submarine detection, and all members of the Reserve Army in the Gaspe and Lower St. Lawrence district have been made ex-officio members of the corps and receive training in that organization. If, however, local defensive action is required, Reserve Army units are also equipped and trained to put up effective resistance pending the arrival of additional military forces.

A system of communication has been worked out to avoid confusion and delay in making reports. To get action, anyone who wishes to report evidence of enemy activity has only to go to the nearest telephone and ask the operator for "Aircraft Detection Corps." The operator will instantly clear all lines to a reporting centre where service personnel are on duty 24 hours a day. Radio and telegraph facilities are available where there is no telephone.

The reporting centre immediately passes the information by

direct telephone to the proper unit of the defence services which have not only full authority but a duty of taking immediate action. No further authorization for taking action need be received from military headquarters. Plans have been so fully worked out that combined operations by two or more of the services occur automatically without waiting for further instructions from higher authority.

The moment a report is received at an operational station, planes of the air force already in the air on anti-submarine patrol are directed by radio to the spot where the U-boat was sighted. Ships of the navy already on patrol in the same area are also directed by radio to the location. If the scene is one in which shore guns of the army can be effective, a battery is immediately notified and has full authority to go into instant action.

Reports are immediately submitted to the proper military headquarters on receipt, but only so that additional forces may be rushed to the scene of action if necessary, and not for any higher authorization.

Benefits for Servicemen



THE following is a summary of existing provisions in the matter of rehabilitation benefits for members of the armed forces after their discharge from service:

Clothing Allowances.—Over six months' service, \$35; under six months' service, \$27 in winter, \$17 in summer.

Rehabilitation Grant.—Grant of 30 days' pay and dependents' allowances to those with more than 183 days' continuous service.

Transportation.—Transportation with travelling expenses provided to point of enlistment, or to place of bona fide residence at time of enlistment, or to any other point in Canada that can be reached without additional expenditure.

Medical Treatment.—Free treatment with allowances for family is available as a permanent right at any time in hospitals of the Pensions De-

partment for conditions related to service. Free hospital treatment is also available, with family allowances, for any remediable condition, with one or two exceptions, for a period equal to length of service, with a maximum of one year for conditions not related to service.

Compulsory Re-employment.—Subject to certain reasonable safeguards, employers are required with respect to those who have left their employment to enlist in the armed forces to reinstate them in employment under conditions not less favorable than those which would have been applicable had enlistment not taken place.

Unemployment Insurance.—Discharged persons who enter insurable employment are entitled, after 15 weeks of such employment, assuming that they have made the contributions required of them, to be credited with the time they spent in the

armed forces since July 1, 1941, the date at which the Unemployment Insurance Act became effective, without the necessity of making contributions to the unemployment insurance fund for such period of service with the forces.

Out-of-Work Benefits.—Benefits similar to unemployment insurance benefits are payable to discharged persons who are capable of employment, but for whom no work is available, for a period not exceeding their length of service, with a maximum of 12 months.

Temporary Incapacitation.—Benefits similar to those payable under the provisions for out-of-work benefits may be paid to discharged persons who are temporarily incapacitated.

Vocational Training.—Vocational training is available to all discharged persons who have no trade or who need a brush-up course in their trade. Maintenance benefits on married and single scale may be paid during such training.

Farmers and Others Awaiting Returns.—Benefits similar to out-of-work benefits and subject to similar limitations may be paid to those engaged in farm-

ing or other business on their own account while awaiting returns from their enterprise.

Educational Benefits.—Maintenance benefits and student fees may be paid to those who resume education interrupted by their enlistment. Students are required to enter a university within 15 months after discharge, and the period for which benefits may be paid is determined by the length of service of the student.

Post-Graduate Courses.—Post-graduate courses may be given, with maintenance, in approved cases.

Pensions.—Any disability arising or heightened during service is pensionable if the applicant saw service in a theatre of actual war, and any disability arising as a direct result of service is pensionable regardless of where the applicant served. Advocates are provided to assist pensioners in presenting their claims.

Employment Service.—Under the Unemployment Insurance Act a Dominion Government employment service has been instituted with employment offices in all main centres across Canada.

Preference in Employment.—Preference in employment is provided in all war contracts to those who have served in the armed forces.

Preference in the Public Service.—Preference in respect of appointments to the public service has been accorded to certain categories of veterans since the end of World War I. This preference has been extended to include veterans of the present war and is a definite statutory provision within the terms of the Civil Service Act.

Veterans' Land Act.—Subject to reasonable conditions this act provides for loans up to \$4,800; \$3,600 is the maximum for land and buildings, of which a 10% deposit by the settler is required; \$1,200 is the maximum for chattels, with no deposit required. The interest rate is 3½%.

Three main types of assistance provide for:

- (a) full time farming for qualified farmers;
- (b) small holdings coupled with a wide range of employment;
- (c) small holdings coupled with commercial fishing.

A substantial rebate in the cost of land and chattels may be granted after fulfilment of contract for a given period.

Welfare Division.—A welfare division of the Department of Pensions and National Health has been established with welfare officers stationed at all main centres throughout the Dominion to assist former members of the forces in becoming re-established and advise them on legislation affecting discharged persons and also with respect to their individual problems throughout the Dominion. These welfare officers are stationed in the following offices of the Unemployment Insurance Commission: Halifax, Saint John, Charlottetown, Quebec, Montreal, Ottawa, Toronto, Hamilton, London, Windsor, Winnipeg, Regina, Saskatoon, Calgary, Edmonton, Vancouver and Victoria.

Citizens' Committees.—

Citizens' committees have been established in most centres in the Dominion to co-operate with welfare officers in assisting discharged persons in their re-establishment problems.

Trade Mirrors War



WITH about one half of one per cent of the world's population Canada has become its third trading nation and the fourth largest producer of war weapons among the United Nations.

As a major supplier of weapons and war materials, Canada's export trade in 1942 was more than double that of 1939, and the rate of increase is being maintained.

The wartime rise in trade is shown by the following figures:

	Exports (excluding gold)	Imports
1933.....	\$ 535,483,789	\$ 401,214,311
1939.....	935,921,713	751,055,534
1940.....	1,193,217,592	1,081,950,719
1941.....	1,640,454,541	1,448,791,650
1942.....	2,385,000,000*	Nearly \$2,000,000,000*

* Publication of exact export and import figures was discontinued in 1942.

This record and most vital volume of exports in Canadian history has been obtained by the concentration of Canadian industry on war requirements and a great curtailment in peacetime products. Practically no goods not essential to the waging of war are now shipped from Canada.

Growing Contribution

Speaking of this change-over in production, Trade Minister MacKinnon stated:

"We have done this for one purpose—to win this war in

the shortest possible time. Our exports from month to month have also served to measure in a striking way the rising power of our contribution to the military and economic might of the United Nations."

While the volume of the nation's trade has been rising, wide changes have occurred in the nature of the trade and the countries of destination and origin. Several factors have brought these about.

The requirements of customers, largely co-belligerents, have

been for war weapons and materials to the exclusion of the goods of peacetime.

A critical shortage of shipping has restricted the use of transportation facilities to materials and equipment with the greatest wartime value.

Many of the countries with which Canada traded in the pre-war period are no longer able to trade abroad. The once substantial markets of Western Europe have been eliminated by German occupation, and Oriental markets have vanished because of Japanese belligerency. At the same time many important and even vital imports, such as rubber, tin, silk and hemp, have been shut off.

The war exchange tax and the War Exchange Conservation Act have changed the character of

imports by taxing non-Empire imports and banning many goods considered non-essential.

Two Best Customers

Both export and import trade have mirrored the change-over of the nation from a peacetime to a war economy. Little of the country's pre-war trade remains, but reconversion to a peacetime basis is occupying the attention of the Canadian government. Faced with the necessity of maintaining and enlarging trade after the war, the nation is looking to retention of Great Britain and the United States as its two best customers and the development of great potential markets for Canadian merchandise and products, such as China, the Caribbean countries, Central and South America.



Citation on the award of the British Empire Medal (civil) to John Christiansen, Kelwood, Manitoba, of the Canadian Merchant Navy:

"John Christiansen is a ship's carpenter of a large merchant vessel which was torpedoed in the South Atlantic. Temporary repairs had to be effected at once, and these were executed by Christiansen. He displayed great courage and devotion to duty for 18 days and nights maintaining close check on repairs to prevent the bulkhead giving away under the pressure."

Facts and Figures

A Record of Canadian Achievement in War



ARMED FORCES

	Navy	Army	Air Force	Total
Present strength (more than)...	64,000	455,000	180,000	699,000
Pre-war strength (more than)...	1,700	4,500	4,000	10,200



NAVY

CANADIAN SHIPS joined in successfully defending "valuable Atlantic convoys against one of the fiercest and most sustained offensives ever mounted by U-boats," the British Admiralty reported on June 20. "The battle, which took place during May, ranged over hundreds of miles and extended intermittently

throughout five days and five nights."

Ships of the Royal Navy and Royal Canadian Navy joined aircraft of the Royal Air Force fighting off the U-boat pack. H.M.C.S. *Drumheller*, a corvette commanded by Lieutenant L. P. Denny, R.C.N.R., and a British frigate were credited

with "possibly sinking" a submarine.

The Canadian Navy has taken a substantial part in escorting the more than 13,000 merchant vessels which have carried more than 77,000,000 deadweight tons of shipping from North America to the United Kingdom since the war began.

Since the outbreak of war, when it had 15 ships, the Canadian Navy's strength has increased 36-fold, to more than 550 ships of all types. During the fiscal year ended March 31, 1943, it was planned to add about 100 ships, but 150 actually were added. This year it is planned to add some 70 fighting ships, besides others not of the combat types.

Canada is building up a flotilla of Tribal class destroyers, to be manned by Canadians and assigned for service with the British fleet. Two Tribal class destroyers were completed for the Canadian Navy in British yards in 1942 and are serving with the Royal Navy. Two others now are being built in the same yards, others in Canada. As completed, they will be

manned by Canadians and join the British fleet until eventually Canada has a flotilla of eight Tribal class destroyers serving with the Royal Navy. The Royal Navy in its turn has placed four of its escort destroyers at the disposal of the R.C.N. These destroyers, which are of the River class, have been renamed *Ottawa*, *Gatineau*, *Kootenay* and *Saskatchewan*.

Backbone of the Canadian Navy is the corvette, a vessel built somewhat on the lines of the sailing ship. Three corvettes can be built in the time it takes to build a destroyer, and they can be built on the Great Lakes and taken down to the sea over the Great Lakes canal and river system, which destroyers cannot. There are more than 70 corvettes in the Royal Canadian Navy, and many others have been built for the British Navy.

The frigate, a new type of warship between the corvette and the destroyer in size, is coming into use in the Canadian Navy. It is larger, has more speed and a greater range than the corvette, and has greater accommodation for the crew. It has about the same fire power as

the corvette and carries a crew of more than 100 men.

There are almost as many minesweepers in the R.C.N. as corvettes. Minesweepers carry guns, depth charges and asdic listening devices and often perform much the same work as corvettes in addition to their duties of sweeping and destroying mines. Like the corvette, the minesweeper carries a crew of more than 50 men.

The Fairmile is a wooden ship, speedier than a corvette and suitable principally for coastal waters such as the St. Lawrence River and Gulf, the Bristol Channel, the Irish Sea and the English Channel. It carries guns and depth charges.

The Royal Canadian Navy and the Royal Navy are responsible for all convoy protection work on the vital North Atlantic route.

The Canadian Navy's duties in this work have been steadily expanded since the outbreak of war until now nearly one-half of the protection of merchant shipping is provided by the R.C.N.

While the United States retains strategic responsibility for the Western Atlantic, including escort operations not related to British trade convoys and local Canadian traffic, complete charge of trade convoys from Northwestern Atlantic ports to the United Kingdom has been assumed by Canada and Great Britain. United States escort vessels are continuing to assist Canadian and British forces.

In this convoy work the navy is assisted by the air forces of Canada, Britain and the United States. All operations are closely co-ordinated.

Navy Minister Macdonald, in the House of Commons on June 10, said that a Canadian naval officer has been in England and the United States studying the possibility of acquiring an aircraft carrier for the Canadian Navy.

Personnel serving in the navy has multiplied many times since the war began, with the present strength of more than 64,000, about 40 times what it was at the outbreak of war. Strength of the navy at March 31, 1942, was 31,000, and it was planned to

take in men at about 1,000 a month; instead, the rate of personnel intake was about twice what had been expected. If the present rate of growth is maintained, the R.C.N. will number about 90,000 by the end of next year, or about the same strength as the British Navy of pre-war days.

To qualify as an officer in the R.C.N., other than in the special branches, a man must work his way up from the lower deck. Prior to February of this year a certain number of men were taken directly into the navy as executive officers, but the prospective officer now must enter the service as an ordinary seaman and must have at least six months' training as a rating, of which half must be served at sea.

If at the end of six months' service as an ordinary seaman a rating is considered worthy of a commission, he is commissioned as a probationary sub-lieutenant and sent to H.M.C.S. *King's*, the R.C.N. training school for officers at Halifax, Nova Scotia.

University naval training divisions are being established at several universities across Canada, which will correspond to Canadian officers' training corps establishments of the army.

Naval ratings are trained at R.C.N. Volunteer Reserve divisions, of which there are 18 throughout Canada; at naval bases and training schools, of which there are 17; in technical schools and universities, and on ships. It requires about six months' training for a man to qualify for the lowest rating and about 14 months to train fully a naval artisan.

There are 29 different jobs to which a naval recruit may be assigned or promoted. Men with trade experience—plumbers, painters, blacksmiths, electricians, cooks—and men with stenographic, banking or accounting knowledge readily find a place in the Canadian Navy.

Enlistments in the R.C.N. by provinces from September 1, 1939, to March 31, 1943:

	Officers	Ratings
Prince Edward Island.....	49	1,036
Nova Scotia.....	534	4,741
New Brunswick.....	119	1,651
Quebec.....	1,118	7,354
Ontario.....	1,722	20,590
Manitoba.....	218	4,208
Saskatchewan.....	130	3,657
Alberta.....	164	4,436
British Columbia.....	983	6,905
Others (including United States and Newfoundland).....	133	222
TOTAL.....	5,170	54,800

In addition to the Women's Royal Canadian Naval Service, there are three personnel components of the Canadian Navy: The Royal Canadian Navy, the Royal Canadian Naval Reserve and the Royal Canadian Naval Volunteer Reserve. The R.C.N. is the permanent core of the organization. The R.C.N.R. is composed of persons who have followed the sea as a profession. The R.C.N.V.R. is made up of

civilians who, in peacetime, were not employed in occupations connected with the sea, but who have been given training to serve afloat.

There are 1,600 members of the R.C.N. serving with the R.N.



(*Operations of the Women's Royal Canadian Naval Service are described under "Women," page 44*).



"Petty Officer Bernays (Petty Officer Max Leopold Bernays, R.C.N.R., of Halifax, Nova Scotia) of the Canadian destroyer *Assiniboine*, in a battle with a German submarine, held to his post in the wheelhouse while flames lighted by German shells leaped around him, and while enemy bullets whistled close to him. For more than thirty minutes he stood at his wheel, receiving and executing in that time no fewer than one hundred and thirty-three helm orders and enjoying at the end the satisfaction of seeing the German submarine disappear, a broken hulk, beneath the waves, and her officers and crew captives aboard his own ship. For his superbly gallant conduct he received one of the rarest awards, the Conspicuous Gallantry Medal."

HON. ANGUS L. MACDONALD, *Minister of National Defence for Naval Services.*



ARMY



THE CANADIAN ARMY OVERSEAS is made up of two corps, one of three infantry divisions, the other of two armored divisions. Besides these there are large numbers of ancillary or corps troops. Corps troops are concerned with communications, repairs to equipment, transport of supplies, medical and hospital services and many other functions. The Canadian Army has more than 170 of these units mobilized in Canada and England.

For the last three years the task assigned to the Canadian Army Overseas has been to hold the bastions of England against invasion. Hard training and keeping pace with the constantly changing methods of modern warfare have kept the army in fighting trim during those years.

The Canadian Army is ready to go into action as a whole or as individual formations fighting in separate theatres of war whenever the strategic planners of the United Nations give the word. Defence Minister Ralston told the House of Commons on May 13 that in personal interviews he had assured Prime Minister Churchill, Secretary for War Sir James Grigg, Chief of the Imperial General Staff Sir Alan Brooke and the previous secretary for war, Captain Mar-gesson, that the Canadian troops in England might be used in whole or in part in any way which would best help to win the war.

Canadian troops are located in strategic defence areas in Newfoundland, Labrador, Alas-

ka and islands adjacent to the West Indies and the east coast of the United States. These troops are coast artillery units, anti-aircraft units, engineer detachments, signal companies and infantry battalions with supporting services.

Canada has made provision for reinforcement of the overseas units. The army in Canada is the foundation of the overseas organization. The 255,000 Canadian troops in the North American area might be divided roughly into three groups of 80,000 each, classed as operational troops, troops in home war establishments and those in the training stream.

The operational troops defend naval bases, airdromes and ports on the Canadian coasts and vital areas inland. Troops of the home war establishments include the administrative staffs of national defence headquarters at Ottawa and the military districts and coastal commands, staffs of the 87 army training centres and schools across Canada, 7,000 or 8,000 of the Veterans' Guard engaged in guarding internment camps and various service troops. The 80,000 troops in the train-

ing stream are those who actually are receiving training for service in Canada and overseas. It takes at least four months to train a soldier.

Sixty per cent of the general service personnel in home war establishments or on the staffs of training centres in Canada are below category "A" or more than 35 years of age or both. The army is releasing all the men that can be spared from home war establishments in Canada so they may be available for overseas service. Army strength in Canada during the 1943-44 fiscal year will undergo a reduction of 10,000 men, but this does not mean that the army will not need more men. Men recruited for general service will be trained and sent overseas as required.

All Canadian Army training is closely co-ordinated with that of Britain and the United States. Training in Canada is integrated with training in Britain, and there is an extensive two-way exchange of officers between the Canadian Army in Britain and the Canadian Army in Canada.

Here are the maximum re-

ARMY PERSONNEL STATISTICS



Pre-war strength.....	More than	4,500
Present strength.....	" "	455,000
Projected intake in year ending March 31, 1944 (for service overseas, 75,000; for service in Canada, 25,000).....	" "	100,000
Canadian Army Overseas.....	" "	200,000
Soldiers sent overseas during year ended March 31, 1943.....	" "	70,000
General Service personnel in Canada available as overseas reinforcements..	" "	100,000
Category "A" personnel called up under National Resources Mobilization Act who could be made available as overseas reinforcements.....	" "	50,000
Strength of army on active service in North American area.....	" "	255,000
General Service personnel in Canada....	" "	190,000
National Resources Mobilization Act personnel.....	" "	65,000
General Service enlistments during year ended March 31, 1943.....	" "	125,000
Enrolment under National Resources Mobilization Act in year ended March 31, 1943 (net after deduction of active service volunteers).....	" "	60,000
Projected Active Army strength in North American area at March 31, 1944. Not Canadian Women's Army Corps strength	" "	254,000
Veterans' Guard strength.....	" "	11,500
Reserve Army strength.....	" "	9,500
Royal Canadian Army Cadets.....	" "	100,000
		98,000

tirement ages for officers in Canada's accent-on-youth army, in

operational and in "static" or nonoperational formations:

	Field Formations Abroad	Static Establishments At Home	Field Formations Abroad	Static Establishments At Home
Major-general.....	57	59	58	60
Brigadier.....	54	59	58	60
Brigadier-general....	54	59	58	60
Colonel.....	54	59	58	60
Lieutenant-colonel...	51	59	58	60
Major.....	51	59	58	60
Captain.....	51	59	58	60
Lieutenant.....	51	59	58	60

The largest Canadian military operation of this war was at Dieppe. Defence Minister Ralston told the House of Commons that the "reconnaissance in force," which was Dieppe, has become "a handbook in connection with landing operations, and every possible lesson which could be learned is being extracted from it for the purpose of future use in the course of the war. . . Already in the North African landings the experience of Dieppe has proved extremely valuable."

The Veterans' Guard of Canada is composed of men who served with the armed forces of the Empire during World War I and are not more than 55 years of age. These men are members of the Active Army, liable to service anywhere, at home or abroad. More than 9,500 veterans are now in this service.



(*The operations of the Canadian Women's Army Corps are described under "Women," page 44*).



The entire Canadian output of Valentine tanks has been shipped to Russia.



AIR FORCE



DAILY THE STREAM of trained men and improved machines joins the Allied air fleets that strike not at the enemy's outposts, but at the heart of the enemy's war economy.

Fourth strongest air power among the United Nations is Canada.

Air crew of the Royal Canadian Air Force serving with Royal Air Force squadrons form 25% of the R.A.F.'s flying strength. This does not include R.C.A.F. squadrons operating in the United Kingdom and elsewhere. There are 32 specifically R.C.A.F. squadrons already organized, and six squadrons in the process of organization.

For every R.C.A.F. air crew member in an R.C.A.F. unit

overseas there are now 11 R.C.A.F. air crew members in R.A.F. units overseas. Air Marshal Harold Edwards, C.B., air officer commanding-in-chief of the R.C.A.F. overseas, has stated that the proportion of R.C.A.F. to R.A.F. will increase rapidly from now on.

As an indication of the dispersal of Canadians in the R.A.F. and elsewhere—during January Canadian casualties occurred in 72 different squadrons, and from February to May there were Canadian casualties in 168 squadrons.

The Canadian bomber group in Britain, which came into being at the beginning of this year, has been in every big raid of the bomber command's mounting European offensive ever since.

The attacks on the Ruhr Valley, site of the most vital German war industry, continued during June and rose to a peak toward the end of the month. There have been at least 550 attacks on targets in the Ruhr by the R.A.F. and R.C.A.F., including 116 raids on Cologne, 56 on Essen, 26 on Dortmund, 53 on Dusseldorf, 60 on Duisberg-Ruhrort, 60 on Hamborn, 85 on Hamm, 22 on Krefeld and 44 on Gelsenkirchen. An attack against Mulheim on the night of June 22 was pronounced by R.C.A.F. veteran air crew to be the most concentrated raid of their experience. Mulheim is a steel manufacturing city less than five miles from Cologne. Thirty-five bombers were lost, seven of them Canadian.

On the night of June 21 a force of 700 R.C.A.F.-R.A.F. planes attacked Krefeld, a Ruhr Valley city four miles west of the Rhine River, 13 miles northwest of Dusseldorf, site of vital steel, chemical and coal industries. Huge fires were started, and raiding pilots reported great explosions, presumably from chemical plants. The fires were still burning the next night. Forty-four planes did not return,

10 of them Canadian.

The next day United States Flying Fortresses struck at a synthetic rubber plant near Recklinghausen, in the Ruhr area, and a motor plant at Antwerp. Canadian fighter planes formed part of the escort on these and other operations during the day.

More than 100 Halifaxes and Wellingtons of R.C.A.F. squadrons joined R.A.F. bombers in a heavy attack on Dusseldorf the night of June 11. A communique by the R.C.A.F. air officer commanding-in-chief overseas said the ground defences, "which were only moderate at the beginning, appeared to be overwhelmed as the attack progressed." The raid devastated more than two square miles of industrial Dusseldorf. Forty-three bombers were lost, 10 of them Canadian.

Halifaxes of the Canadian bomber group formed part of a force of bomber command aircraft which attacked the great Schneider armament and locomotive factories, the largest arms factory in France, at Le Creusot, 170 miles southeast of Paris, on June 19.

AIR FORCE STATISTICS

Pre-war strength.....	Approximately 4,000		
Strength at May 14, 1943.....	180,172		
Discharges, retirements and resignations.....	More than 13,200		
Casualties.....	" " 7,050		
Personnel to be enlisted during fiscal year ending March 31, 1944 (excluding Women's Division).....	Approximately 53,000		
R.C.A.F. personnel sent overseas.....	More than 40,000		
Number of R.C.A.F. squadrons established overseas.....	32		
Total number of R.C.A.F. squadrons to be established overseas.....	38		
Hours flown on operations by R.C.A.F. overseas during April, 1943.....	More than 10,000		
Average strength of home war establishment in the year ended March 31, 1943.....	Approximately 23,500		
Projected average strength of home war establishment during the year ending March 31, 1944.....	" 35,000		
Anticipated over-all increase in home war establishment aircraft, air crew and hours flown.....	Nearly 100%		
Operational work by home war establishment personnel:			
	<i>Hours</i>		
1939 and 1940.....	14,300		
1941.....	25,980		
1942.....	94,450		
Nautical miles flown by eastern air command anti-submarine squadrons during 1942.....	More than 5,000,000		
Number of sailings of vessels escorted by eastern air command anti-submarine squadrons during 1942.....	" " 12,000		
Ships sunk within 300 miles of Canadian coast while escorted by R.C.A.F.....	Less than 3%		
Strength of Women's Division.....	More than 12,3' 0		
Strength of Air Cadets.....	" " 22,000		
Detailed cash requirements of the R.C.A.F. for the fiscal year 1943-44, compared with probable expenditure for 1942-43:			
	1942-1943 1943-1944 Increases		
B.C.A.T.P.....	\$410,825,000	\$445,335,845	\$ 34,510,845
Western Hemisphere operations.....	172,050,238	300,834,882	128,784,644
Overseas war establishment.....	20,244,600	383,250,687	363,006,087
TOTALS.....	\$603,119,838	\$1,129,421,414	\$526,301,576

Canadian fliers also joined in the raids on Cologne on June 16, Freidrichshafen on June 20, Oberhausen on June 14. During June fighter, army co-operation, light and medium bomber and reconnaissance squadrons of the R.C.A.F. overseas continued their varied activities.

Canadians are flying in the aircraft which, from African bases, are pounding strategic Mediterranean defence points of the Axis. R.C.A.F. fliers were stationed in the Middle East early in the African campaign—some of them have been there for more than two years. They joined in the pursuit of the Afrika Korps, the "carpet bombing" in the Tunis-Bizerte area and the attacks which forced the capitulation of Pantelleria. Canadians for considerable time have made up one quarter of the "flying garrison" of Malta.

Aircraft of the eastern air command anti-submarine squadrons are concerned with escorting convoys off Canadian shores. While engaged in this role, they have made 43 attacks on enemy U-boats. From February 28 to the beginning of June of this

year they made 14 attacks on U-boats in the Atlantic.

To keep Canada's war planes flying over frozen Arctic wastes in the worst of sub-zero temperatures, the R.C.A.F. proposes to form a winter experimental and training flight at Kapuskasing, Ontario. Aims of the unit will be fourfold:

1. To select and develop the most suitable ground equipment for all types of aircraft.
2. To reduce to a minimum the changes necessary to enable various types of aircraft to operate under Arctic temperatures.
3. To establish the proper technique for servicing, maintenance and operations in cold weather, which varies considerably among aircraft.
4. To spread knowledge of winter flying throughout the R.C.A.F. by courses of instruction and practical exercises.



(*Operations of the R.C.A.F. (Women's Division) are described under "Women," page 44.*)

BRITISH COMMONWEALTH AIR TRAINING PLAN



ALTHOUGH THE BRITISH Commonwealth Air Training Plan is essentially Canadian, young men from all the United Nations learn the art of air combat in its schools.

An ever-growing proportion of air crew required to man the planes on the fighting fronts is trained in the B.C.A.T.P. The more than 50,000 air crew trained in the plan would be more than enough to man 15,000 combat planes. Peak production of air crew on a monthly basis will not be reached for several months.

A joint enterprise of the Canadian, Australian, New Zealand and United Kingdom governments, it is administered by the R.C.A.F., and more than 60% of the graduates are Canadians.

The plan is based on a proposal made to the governments of Canada, Australia and the United Kingdom on September 26, 1939, to set up a common air

training system. The proposal was accepted in principle by the Canadian government on September 28. The first agreement was signed on December 17, 1939, the same day the first contingent of the Canadian Army landed in Britain. Immediately the great project of building airfields and training instructors began.

Eight elementary flying training schools were opened in June and July of 1940. First recruits—50 pilots, 44 observers and 75 wireless operators—reported for duty on April 29, 1940. On October 28, 1940, the first pupils were graduated and arrived in Britain the next month.

All the schools of the plan were to be in operation during 1942. On December 15, 1941, two days before the second birthday of the B.C.A.T.P., the final school was opened, beating the time limit by many months.

Although the final stages of

B.C.A.T.P. STATISTICS

Air crew sent overseas from B.C.A.T.P. and R.A.F. schools in Canada.....	More than 50,000
Ground crew trained in B.C.A.T.P. and R.A.F. schools in Canada.....	" " 75,000
Strength of B.C.A.T.P. (all ranks) at July 1, 1942.....	" " 109,000
Strength of B.C.A.T.P. (all ranks) at May 1, 1943.....	" " 150,000
Number of schools originally planned to be operated by B.C.A.T.P.....	74
Number of schools operated by B.C.A. T.P. (many with twice the capacity originally planned).....	154
Number of training aircraft used by B.C. A.T.P.....	More than 10,000
Miles flown in B.C.A.T.P. since its incep- tion.....	6,588,098,593
Miles flown in B.C.A.T.P. during the first quarter of 1943.....	162,569,510
Miles flown in B.C.A.T.P. during March, 1943.....	62,205,415
Average daily mileage flown in B.C.A.T.P.	2,006,626
Probable expenditure by R.C.A.F. for B.C.A.T.P. during the year ended March 31, 1943.....	\$410,825,000
Current monthly expenses of B.C.A. T.P.....	approximately \$40,000,000
Estimated expenditure by R.C.A.F. for B.C.A.T.P. during the fiscal year end- ing March 31, 1944.....	\$445,335,845

training of many classes of air crew cannot be completed on this side of the Atlantic, the larger part of the training is done in Canada. The following are percentages of air crew

turned out under the B.C.A.T.P. who complete their training in Canada, and the percentages of training in Canada of those who complete their training in the United Kingdom:

	Percentage of air crew who complete training in Canada	Percentage of training in Canada by those who complete training in U.K.
Bombing navigators.	94	77
General navigators..	..	74
Wireless navigators..	19	81
Air bombers.....	..	73
Wireless air gunners.	86	76
Air gunners .....	..	58
Pilots.....	..	76

Under the original agreement Canada paid more than \$600,000,000 of the total \$900,000,000. This original agreement was intended to continue until March, 1943, but a new agreement was signed on June 5, 1942. It became effective July 1, 1942, and operates to March 31, 1945. Under the new agreement the plan is considerably enlarged. It will cost \$1,500,000,000, 50% of which will be paid by Canada. The United Kingdom will pay the remaining 50%, less deductions representing payments

made by New Zealand and Australia for the cost of training air crew.

The average miles flown each day in the plan, 2,006,626, is a distance equal to 80 times around the earth at the equator. The total miles flown in March, 1943, were 62,205,415, a distance equal to 260 trips to the moon. The cumulative number of miles flown in the plan from its inception to March, 1943, totalled 6,588,098,593, equal to 71 trips to the sun.





MUNITIONS



CERTAIN OF CANADA's major production objectives have been reached. Late in 1942 substantial quantities of every item of war equipment for which Canada had received orders in the first $2\frac{1}{2}$ years of the war were being delivered. This does not mean, however, that there will be any slackening of the over-all effort, but rather a change in emphasis. Some programs will be reduced, others expanded. There are some rather drastic reductions in ground army stores on the one hand, but on the other greatly increased demands for naval vessels, guns and equipment, combat aircraft and radio-location equipment.

Before notice of changes in program, the over-all production program for the fiscal year 1943-44 totalled \$3,653,000,000.

Now the revised program is estimated at \$3,425,000,000. Of this 6% shrinkage, about \$30,000,000 represents reductions in defence construction projects, so that less than \$200,000,000 or 5 $\frac{1}{2}\%$ is left as the net reduction in the production program.

Ammunition.—Some cuts in production will take place at once, but wherever possible any necessary reductions will be made over a period of months to cause a minimum dislocation of manpower. Twenty-eight types of heavy shells of 15 different calibres, ranging from 40 mm. quick-firing to 7.2" howitzer, were being made at the close of 1942. Three types have gone out of production so far this year. Of the remaining 25 types, two will be increased in output,

MUNITIONS

PRODUCTION RECORD

	Weekly	To Date
Munitions.....	\$55,000,000	\$4,500,000,000
Ships (escort, cargo, patrol)...	6 or more	500 launched
Aircraft.....	80	8,000
Motor vehicles.....	4,000	500,000
Armored fighting vehicles (including tanks).....	450	24,000
Guns (barrels or mountings)...	940 <small>(570 guns and barrels and 370 mountings)</small>	55,500
Heavy ammunition (complete rounds, filled).....	525,000	38,000,000
Small arms (rifles, machine guns, etc.).....	13,000	630,000
Small arms ammunition.....	25,000,000 rounds	2,000,000,000 rounds
Chemicals and explosives.....	10,000 tons	800,000 tons
Instruments and communications equipment.....	\$4,300,000	\$160,000,000
Contracted expenditure for industrial expansion and defence construction.....		about \$1,190,000,000
Estimated production program for fiscal year 1943-44.....		\$3,425,000,000
War production in 1942.....		2,600,000,000
" " " 1941.....		1,200,000,000
Value of munitions and other war materials exported in World War I.....		1,002,672,413

others will be produced at the current rate, and others will be reduced. Nearly 50 plants are engaged in making shells alone, and there are scores of other plants producing components, including 12 types of fuses, 14 types of cartridge cases, two types of gaines, six kinds of primers, two types of depth charges, 10 types of trench mortar bombs, pyrotechnics of 70 different kinds, as well as practice bombs, anti-tank mines and rifle grenades.

Components.—As the output of shells declines, so the production of cartridge cases, fuses, primers and gaines also will be reduced. However, all the cartridge case manufacturing capacity released will be diverted to making additional cartridge cases for the United States. Over-all production will decline. Some, but not all, plants can be converted to the manufacture of other types of equipment.

Chemicals and Explosives.—Production of the secret and most powerful explosive developed anywhere during the present war is being increased. As the heavy ammunition program recedes from its peak, pro-

duction of certain explosives and propellents also will be reduced. Forty different projects are under control of the Crown company, Allied War Supplies Corporation, covering an area equal to that of Montreal. Thirty-four are already in operation. Of the 18 major projects, three are mammoth ammunition-filling developments, three are making explosives, two are fuse-filling undertakings, and the others are chemicals producers. Total employment exceeds 50,000 men and women. Great Britain and the other United Nations have relied heavily on Canada for this production.

Small Arms Ammunition.—In 1940 Canada made only three types to a value of \$4,500,000. Now it is making 20 main types, ranging in calibre from .22 to 20 mm. and having a value of \$23,000,000 for the first four months of 1943. As an example of a lowered target, the future objective of the 9 mm. bullet used in the Sten carbine has merely been lowered so that the present production figure will be tripled instead of quadrupled. The plants and arsenals employ 30,000, half women.

Guns.—Some gun schedules now are being revised downwards. The items most likely to be affected are the 3.7" and Bofors anti-aircraft guns and the six-pounder anti-tank gun. The scheduled production of 3.7" and 40 mm. Bofors AA guns will carry on at a reduced scale to the end of 1944. The plant making the six-pounder carriage is being converted to the manufacture of 20 mm. universal mountings for the army and single 20 mm. mountings for the navy. In the production of heavy guns and small arms Canada has achieved mass output on a constantly rising scale. Toward the end of 1942 the monthly ordnance output was greater than it had been for all 1941. More than one-fifth of the total government investment in war plants has been allocated to the production of guns and small arms. Twelve types of heavy ordnance and 16 types of carriages and mountings are being made in Canadian shops. Merchant ships and combat vessels made in Canadian yards now can be equipped with Canadian-made guns. Canadian field artillery, anti-aircraft guns, tank and anti-tank guns are shipped

for service on all fronts.

Small Arms.—In line with the changing picture of the overall production program, there also will be adjustments in the small arms schedule. Maximum output of the Bren gun, 8,000 a month, was reached in June and will be maintained at that rate until the end of 1944. Original schedule for the No. 4 army rifle, Canadian version of Lee-Enfield, was doubled during the last year, and the output now exceeds 34,000 a month. Its production will be increased to more than 40,000 a month. Production of the Sten, which is now at peak, will be slightly reduced from the maximum planned—10,000 a month. Orders on hand for Vickers, .5-inch naval machine guns, training rifles and 2-inch trench mortars are sufficient to carry into 1944. Production of the Boys anti-tank rifle will be discontinued during the summer. Requirements for both the Browning aircraft and tank type machine guns have been met, and production of these weapons is being abandoned, but it will be replaced partly by the Browning pistol and a 20 mm. machine gun. There are eight major plants and scores of sub-con-

tractors engaged on small arms contracts. Output of small arms in 1942 increased 1,300% over 1941. Present production includes rifles, carbines, anti-tank rifles, smoke dischargers, bomb throwers, two types of trench mortars and four types of machine guns.

Naval Guns and Naval Orders.—While there will be some slight changes in this program, the over-all picture involves a substantial increase in output. There will be a substantial increase, too, in the production of a wide variety of other naval equipment, such as the components of naval torpedoes. There will be a larger output from the 168 firms now engaged in making the complicated and expensive components of anti-submarine detection devices, which Canada delivers complete to the navies of the United Nations. Production will be increased of 60 or more types of the most complicated instruments for naval purposes, including equipment for arresting planes on carrier decks, secret gun sighting devices and fire control instruments costing up to \$30,000 each. Canada now is producing four types of naval guns and

10 types of naval mountings for use both on combat and merchant ships; 20 or more components of naval torpedoes in quantity, including engines, propellers, bodies, transmission gear and gyroscopes, the output of all of which will be increased. Many British warships being repaired and re-equipped in Canadian and United States ports are being supplied with Canadian-made guns, mountings, anti-submarine detection equipment and instruments.



In June Canada's 500,000th military vehicle came off the assembly line.

Motorized Equipment.—So highly are Canadian-made military vehicles rated that the program of ground equipment production is being continued at its present peak. Military motor vehicles, as distinguished from fighting units, are being turned out in more than 100 different types, and in June the 500,000th such vehicle rolled from the assembly line. Canada's output of fighting vehicles and motor transport has been one of the most important con-

tributions its industry has made to the war. More than 36% of the motorized equipment throughout the entire Middle East is of Canadian make, and 50% of the load-carrying vehicles used by General Montgomery's victorious Eighth Army were Canadian made. Army engineering design branch designers have achieved remarkable results in improving the quality, performance and utility of mechanized units. Those units now being sent overseas are more serviceable, better built and more economically manufactured than the units of a year ago, and new models are constantly going into production. The Canadian "dry pin track" for tanks has just been approved for production.

Tanks.—The Valentine tank program — 1,400 tanks which have gone to Russia—has just been completed, and the last tank was delivered on schedule. The plant has been converted to the production of engines and components for the escort vessel program. More than 1,700 Ram tanks have been produced, and the end of the contract is being approached. The tank arsenal now is producing self-

propelling gun mounts and also is to produce the M-4 tank, which is now standard for the United States, British and Canadian armies.

Instruments and Communications.—Canadian invention is responsible for seven major developments in the production of signals equipment, ranging from a "talkie-walkie" set, which one man can operate as easily as a cradle 'phone, to a super-highpower field wireless station with a radius of more than 100 miles. The 1943 production of instruments will reach the \$250,000,000 total. Three new industries have been developed in Canada to meet the demands of the radio industry, the output of which has expanded 16-fold since the beginning of the war. They are a dynamotor industry, a ceramic insulation industry and a crystal industry. Canada has become a major source of United Nations supply in this field. All the communications devices for Canadian tanks, ships, planes and motorized vehicles are being produced in volume in this country.

Aircraft.—Canada now is passing through an intermediate

stage, entering production of new trainer types and just achieving production of combat planes such as the Lancaster and Mosquito. The low production point arising from the change in models now has been passed, and production figures will increase steadily. The first Lancaster is expected to be test-flown within a few weeks. Nine types of aircraft are being produced as follows:

FAIRCHILD CORNELL — single-engined elementary trainer.
NORTH AMERICAN HARVARD—single-engined advanced trainer.
CANADIAN ANSON — twin-engined reconnaissance bomber and bombing and gunnery trainer.
BRISTOL BOLINGBROKE — twin-engined reconnaissance bomber and gunnery trainer.
CATALINA PBY - 5A — twin-engined coastal reconnaissance amphibian.
LANCASTER — four-engined long-range bomber.
CURTISS "HELLDIVER" — single - engined navy dive-bomber.
MOSQUITO—twin-engined fighter-bomber.
NOORDUYN NORSEMAN—single-engined transport.

Canada expects later this year to be producing a transoceanic cargo plane; also the design of a Canadian four-motored transport plane has been commenced. Planes produced to the end of May total 8,014 as follows:

Elementary trainers.....	2,360
Advanced trainers.....	3,578
Service aircraft.....	2,076

The Canadian aircraft industry and plants in component manufacture now employ more than 100,000 workers, more than 25% of whom are women. Because production is being increased, the industry in future will be able to absorb all workers not required by the armed services and in high priority shipbuilding who hitherto were employed on those programs which are to be curtailed.

Aircraft Overhaul.—In addition to the production of new aircraft, Canada has established an aircraft overhaul industry to service the thousands of planes now operating in the Dominion. Thirty special plants are located strategically across the nation to make regular engine overhauls, to take care of air-frame reconditioning and to rebuild damaged planes. These plants recondition and replace into service 200 planes and 800 engines every month.

Cargo Shipbuilding.— This program is now at its peak and will be maintained there. During the 20 years before the war Canada built not one seagoing merchant ship. In May alone

19 cargo vessels were launched from Canadian yards. By the end of May a total of 168 freighters had been launched, and of these 141 had been delivered. All but four of these were 10,000-ton vessels, and the others were 4,700-tonners. Freighters delivered, under construction or on order total more than 300, of which 90% are 10,000-ton ships. Roughly one-half of the over-all commitments for shipbuilding in Canada, which total \$1,000,000,000, will be spent on cargo ship construction. There are 43,000 workers in the 12 Canadian yards engaged in the cargo ship program, and the types of ships are: North Sands (Liberty ship in the United States); Victory, an oil burner, and a 4,700-tonner originally designed for British operation and now being modified to meet Canadian operating conditions. Arrangements are being made to build next year an improved design of cargo ship to be known as the Modified North Sands, one of the characteristics of which will be its adaptability for either coal or fuel oil. The Park Steamship Company Limited, a crown company, turns over vessels for management and operation to

steamship firms to be placed in trade designated by the Canadian Shipping Board. So far 12 10,000-ton and five 4,700-ton vessels and one tanker have been delivered to the company; by the end of the year these numbers are expected to be increased to 30, eight and 10 respectively, all to be handled in the same way. In addition, 30 10,000-tonners have been delivered to the company to be chartered to the Ministry of War Transport of the United Kingdom. During the war the size of the company's fleet will be limited only by the number of Canadian crews that can be obtained. After the war the ships now being chartered to the United Kingdom will be returned to Canada and added to the Canadian merchant fleet.



In three years of war Canada repaired 5,000 vessels apart from naval ships.

Naval Shipbuilding.—This entire program is being expanded and expedited. Up to June 11 contracts had been placed for 424 frigates, corvettes and steel minesweepers. By the end of the month a total of 221 had been

launched. Seventeen of these escort craft were launched during May. In addition to the steel vessel program, orders had been placed for 178 wooden patrol ships and wooden minesweepers, of which 100 were in the water by the end of May. Also two destroyers of the Tribal class are being built. Eleven yards are engaged on the construction of escort vessels. Of these the largest type is the frigate, of which 18 already have been launched. These ships, more than 300 feet in length, are bigger, faster and more heavily armed than corvettes. There are some 65 smaller boatbuilders with about 4,000 employees turning out a wide variety of small craft ranging from lifeboats to the smaller patrol boats. Of the 4,000 boats ordered from these yards, about 75% have been delivered. Expenditure on this small craft program now totals more than \$16,000,000. In addition several eastern yards are engaged in ship repair and overhaul work. Besides the 21 major shipyards engaged on cargo and naval shipbuilding, there are well over 300 Canadian manufacturers on the component program. They supply the

countless requirements of the industry, from rivets to ship plate, from navigation instruments to engines and boilers.

Destinations.—About 30% of all Canadian war production is delivered directly to the Canadian armed forces at home and abroad. The remainder goes to Britain, the United States, India, Africa, China, Australia, New Zealand and the South Pacific.



This year Canada will supply 70% of Britain's lumber imports.

Timber.—Canada's commitments to Britain, the British dominions and the United States for military lumber are being met in full. In 1943 Canada will supply Britain with 70% of its lumber import requirements; British Empire countries with about 100,000,000 feet of urgently needed timber for military purposes, and the United States with about 1,000,000,000 feet of lumber, all of which will be directed into military uses.

Rubber.—Consumption of rubber for civilian purposes has

been reduced to 10% of what it was before the war, and the progressive reduction in the use of rubber still is going forward by means of substitutes and reclaim. Construction of the government-owned Polymer Corporation plant at Sarnia, Ontario, is progressing, and, when operating at capacity, it will have an output of 34,000 tons of buna-S and 7,000 tons of butyl rubber a year. The manufacture of buna-S rubber may be under way by the end of August, and the plant probably will be completed and in operation on a full scale basis by November 1. It was designed to meet the full war needs of Canada, and its production of synthetic rubber will be used only for direct war purposes and such other essential purposes as now crude rubber is used.

Steel.—For 1943 Canada's steel requirements are estimated at nearly 5,000,000 tons, of which domestic mills will supply more than 3,000,000. Canada has built the two largest blast furnaces in the British Empire. One is not quite finished, but during the summer the pig iron output will be at a rate of more than 2,500,000 tons a year,

which is nearly four times as much as in 1939. Steel production has been doubled since the war began, and Canada now is the fourth greatest steel producer among the United Nations, exceeded only by the United States, Russia and Great Britain. As a result of the great increase in productive capacity and because of rigid curtailment policies, all Canada's heavy obligations have been met. Canada always has been a heavy importer of steel, and when the European sources were cut off early in the war it had to rely on the United States and its own resources. Despite an enormous increase in its requirements, it is now dependent on the United States for only one-third instead of nearly one-half of its supply. The most spectacular expansion has been in the field of alloy steels for guns, armor plate and machine tools, and these are the types of steel which call for the greatest metallurgical skill, the most complex equipment and the greatest number of man hours. The production of alloy steels is now five times as great as in 1939. Before the war Canada had not manufactured a pound of armor plate, yet today

the quality of this product is so high and the manufacturing process so skilful that metallurgists from Britain and the United States have come to observe the operations. The factory making this plate now is turning out enough for all Canadian requirements for tanks, armored vehicles, gun shields and certain naval purposes. The output of steel ingots has increased from less than 1,500,000 tons in 1939 to an expected rate of more than 3,000,000 tons a year at the end of 1943. New rolling and finishing mills of the most modern type have been equipped and are in operation. Two new plate mills helped to increase production of plate to nearly 300,000 tons more in 1942 than in 1939. Most of this has gone into building cargo vessels and fighting ships. Shell steel production now is at about 250,000 tons a year. About 500,000 tons of steel a year are being used to make tanks and other army vehicles. Steel foundry capacity also has been expanded. The output of castings has risen from 61,000 tons in 1939 to 160,000 tons in 1942.

Non-Ferrous Metals.—Canada is the greatest base metal



Canada is the world's greatest base metal exporter.

exporting country in the world, and this year its output will attain the highest peak in its history. This has been achieved by an enormous expansion of the aluminum industry, development of a Canadian process for the production of magnesium, extension of recovery operations at large base metal mines, revival of old mines, expansion of existing properties and development and exploitation of new marginal and sub-marginal deposits. The aluminum industry provides possibly Canada's most spectacular story of wartime expansion. The Canadian output is more than six times that of 1939, is now greater than the total 1939 production of the rest of the world and is supplying about 40% of the war requirements of the United Nations; yet the demands are now so great—18,000 pounds are required for one large bomber—that civilian curtailments will continue until the war is over. In the case of

copper, nickel, lead and zinc the aggregate refined production is estimated at 827,800 tons for 1943 as against 662,100 tons in 1939. Canada now is producing 95% of the combined nickel output of the United Nations; 20% of the zinc output; 12½% of the copper output, 15% of the lead output; 75% of the asbestos output and 20% of the mercury output. Formerly entirely dependent on imports for its supply of magnesium, Canada now has a government owned and operated magnesium plant, using a process developed in Canada, which supplies its own needs plus a surplus for export. Efforts have been made to stimulate the production of tin, tungsten, molybdenum, mercury,

chrome and manganese, and where necessary to build up stock piles of imported metals. The search for molybdenum has met with considerable success. Two new properties, one financed by the government, will be in operation later this year, and their combined output should provide the major part of Canada's requirements. Before the war Canada was entirely dependent on imported supplies of mercury, but now it is one of the important producing countries of the world and is exporting in quantity. Canada's production of refined metals has increased as follows:

	1939	1942
	Tons	Tons
Refined copper..	232,000	270,600
Refined lead....	191,000	243,800
Refined nickel..	64,500	93,300
Refined zinc	175,600	216,000



"Sailors tell of the time when Commander Hibbard (Commander J. C. Hibbard, R.C.N., of St. Malachie, Quebec) of the Canadian destroyer *Skeena* remained on the bridge of his ship for sixty-six hours in midwinter, fighting off a bitter submarine attack on his convoy, and brought his ship safely into a United Kingdom port. For that act of enduring gallantry and for other consistently good work Commander Hibbard was rewarded with the Distinguished Service Cross."

HON. ANGUS L. MACDONALD, *Minister of National Defence for Naval Services.*

CANADIAN MANPOWER PICTURE 1943

(Population over 14 years of age, 8,720,000)

EACH UNIT EQUALS APPROXIMATELY 250,000 PERSONS



ARMED FORCES



20,000 women



625,000 men



MUNITIONS & ESSENTIAL
CIVILIAN INDUSTRY *



1,503,000 men

622,000 women



MEN IN AGRICULTURE



1,020,000 men



LESS ESSENTIAL
CIVILIAN INDUSTRY *



787,000 men



530,000 women



EMPLOYABLE BUT
NOT IN INDUSTRY •



301,000 men



2,768,000 women



RETIRÉ AND UNEMPLOYABLE



244,000 men



300,000 women

* The term "industry" includes mining, forestry, construction, public works, trade and services as well as manufacturing.

• Includes students, farm and other women not employed in industry and men temporarily out of work.

MANPOWER

RESPONSIBILITY FOR mobilizing and allocating all manpower in Canada rests with National Selective Service under the Department of Labor.

The National Selective Service Advisory Board advises the director of National Selective Service with reference to the utilization of manpower in the prosecution of the war and the administration and enforcement of National Selective Service regulations.

The board consists of senior civil servants representing the departments most directly interested in manpower: Defence, Munitions and Supply, Agriculture, Labor, Finance and the Wartime Prices and Trade Board; five representatives of organized employers and five of organized labor and a representative of organized farmers.

Labor priorities, in which every employer or establishment is classified as having very high, high, low or no labor priority, give the 216 National Selective Service offices a yardstick by which to gauge the importance of labor requirements.

The industrial mobilization survey plan facilitates the orderly withdrawal of replaceable workers from essential industries into the armed services and provides for their replacement with the least possible disturbance to production. The survey requires the employer to report all employees of military age, along with a description of the work they are doing and the length of the time required to train replacements, particularly stressing the use of women. The survey thus acquaints the employment service of the employers' needs for replacement, informs it of any surplus labor and enables a schedule to be drawn up by means of which the employer is advised of the order in which his employees will be called.

The Minister of Labor, at April, 1943, is empowered to order employers in specified industries to discontinue employing persons in age classes designated for military service but not acceptable to the army, and youths 16, 17 and 18 years of age, after a specified date unless a special permit is obtained.

Two orders have been issued so far, covering a list of more than 20 groups of employments.

MANPOWER DISTRIBUTION

14 years and over

(In thousands)

	August 31, 1939			June 1, 1941			January 30, 1943			Total % of
	Males	Females	Total	Males	Females	Total	Males	Females	Total	
Persons 14 years and over	4,289	4,026	8,315	4,385	4,131	8,516	4,480	4,240	8,720	100.0
Armed forces	10	....	10	305	1	306	625	20	645	7.4
Direct war industry .....	....	....	....	420	40	460	820	216	1,036	11.9
Civilian Industry:										
High priority .....	....	....	....	....	....	....	683	406	1,089	12.5
Lower priority .....	....	....	....	....	....	....	295	279	574	6.6
Lowest priority .....	....	....	....	....	....	....	492	251	743	8.5
Total industry	1,900	750	2,650	1,693	805	2,498	2,290	1,152	3,442	39.5
Agriculture	1,490	....	1,490	1,220	....	1,220	1,020	....	1,020	11.7
Gainfully occupied (civilian)	3,390	750	4,140	3,333	845	4,178	3,310	1,152	4,462	51.2
Farm women	925	925	....	875	875	....	830	830	830	9.5
Students .....	....	....	....	288	302	590	261	309	570	6.5
Other women .....	....	....	....	....	1,808	1,808	....	1,629	1,629	18.7
Men temporarily unemployed .....	....	....	....	168	....	168	40	....	40	0.5
Not gainfully occupied	889	2,351	3,240	456	2,110	2,566	301	1,938	2,239	25.7
Unemployable .....	....	....	....	291	300	591	244	300	544	6.2

The estimates for January 30, 1943, are based largely on the report on employment survey; for June 1, 1941, on the population and agricultural censuses; and for August 31, 1939, on information such as the census of industry, the monthly data on employment statistics, etc. The figure on agriculture for August 31, 1939, includes an estimated 125,000 temporary harvest workers; this must be taken into account in calculating the decline in agricultural employment from 1939 to 1943.

SUMMARY OF MOBILIZATION STATISTICS

(March 20, 1941, the date on which men first were drafted into home defence service of the Canadian Active Army under the National Resources Mobilization Act, through April 16, 1943).

Administrative Divisions	Medical Examination		Postponements			Military Training		
	Number Called	Number Examined	Number Requested	Number Granted	Number in Effect	Number Called	Number Reported	Number Accepted
"A" London.....	74,578	43,479	16,522	16,241	7,303	18,636	12,466	9,436
"B" Toronto.....	189,205	100,747	40,677	30,616	14,113	54,460	30,013	22,658
"C" Kingston.....	60,008	38,594	20,735	19,351	14,290	17,096	7,766	6,238
"D" Port Arthur.....	12,189	7,479	1,974	1,759	868	4,271	3,159	2,297
"E" Montreal.....	210,245	140,508	47,499	39,178	15,908	69,450	32,116	25,934
"F" Quebec.....	107,883	63,346	25,248	17,732	11,855	20,524	13,225	10,846
"G" Halifax.....	43,113	29,172	9,780	7,496	3,898	14,826	10,830	7,662
"H" Saint John.....	33,303	21,743	5,465	5,173	4,061	10,666	7,999	5,825
"I" Charlottetown.....	8,167	5,061	3,107	2,668	1,794	2,891	1,738	1,255
"J" Winnipeg.....	67,394	43,754	14,303	11,772	7,213	15,340	9,904	7,916
"K" Vancouver.....	72,147	46,394	20,938	18,408	8,555	23,741	10,856	9,222
"M" Regina.....	69,000	38,956	18,126	11,829	4,615	20,729	11,396	9,975
"N" Edmonton.....	41,243	29,409	8,850	8,327	6,500	16,914	9,194	7,699
Total.....	988,475	608,642	233,224	190,550	100,973	289,544	160,662	126,963

* As of June 1, 1943.

The difference of approximately 380,000 between the number of men sent medical notices, and the number examined, is accounted for by notices undelivered, men who joined the forces voluntarily either before or on receiving medical notices, men sent notices to whom the regulations do not apply, and some defaulters.

The reduction of approximately 319,000 in the number called for military training, compared to the number examined, is accounted for by men being medically unfit, men being granted postponements—and again (but no doubt fewer in number) voluntary enlistments. Defaulters would also add to the difference.

Voluntary enlistments, as well as postponements, account for most of the difference of 129,000 between the numbers called for military training and those reporting.

Physical reasons, on further medical examination, are responsible for the reduction in the number accepted for training, compared to the number called.

The number of men registered January 1 to March 15, 1943, as not having received medical notices was 144,973.

The minister of labor has stated that further employments will be included progressively.

The employees affected must register at the nearest Employment and Selective Service office. This makes available for essential work such as farming, lumbering, coal mining, fishing and munitions workmen who have been called for national service and are not acceptable to the army. Non-compliance with a direction to transfer to higher priority industry, including farm labor, will make a man liable for service in an alternative work camp on somewhat the same basis as a conscientious objector.

Teachers employed in schools, colleges and universities are to be retained in their professions. A bona fide teacher cannot be employed in any other occupation without a special permit from a Selective Service officer.

To provide manpower for fuel-wood cutting, Selective Service officers are given authority for compulsory direction for employment of men between 16 and 65 in this work. This applies also to employment in fishing and fish-processing.

Any person between 16 and 65 years of age must register for work with the local office of National Selective Service if not gainfully occupied for seven consecutive days (full-time students, housewives and clergy are not included). Men of military call-up age applying for permits to obtain employment must furnish proof that they have not contravened mobilization regulations. No Canadian employer or employee may make any employment arrangement without first obtaining authority of the local office of National Selective Service, unless the parties involved are specially excepted under the regulations.

With relatively few exceptions, an employee has to submit his resignation seven days prior to leaving his job. An employer similarly must conform to this regulation. A copy of the written notice must be forwarded to the local employment office. The employee then is given a separation slip and no employer may interview a prospective employee unless the applicant has a permit from an employment office to look for employment.

National Selective Service is also responsible for the call-up

of men for compulsory military training. Under mobilization regulations men, single or childless widowers at July 15, 1940, from the ages of 19 to 45 inclusive, and medically fit, are liable for military service. So far only men born between 1902 and 1924 inclusive (who have reached the age of 19) are being called. On December 15, 1942, it was announced married men between the ages of 19 and 25 would be called up.

Postponement of military service usually is granted to men engaged in essential industries. As of June 1, 1943, approximately 100,000 postponements were in effect, and it is estimated that about two-thirds of these

are in agriculture and one-third in industry.

On the declaration on May 17 that a state of national emergency exists in regard to the production of coal in Canada, new Selective Service regulations prevent coal miners being accepted as volunteers for the armed forces, and workers in coal mines are granted automatic postponement of military training under the National Resources Mobilization Act until February 1, 1944. Coal miners are granted leave from the armed services in Canada if they are willing to return to the mines. All ex-coal-miners are requested to return to coal mining regardless of their present occupations.



CANADIAN MERCHANT SEAMEN

Certified to date in central registry, Ottawa	38,000
Serving on vessels of Canadian registry listed as missing and presumed dead.....	656
Known to be prisoners of war.....	124
Claims paid by Department of Transport for loss of effects by Canadian merchant seamen due to enemy action.....	833
Dependents of Canadian merchant seamen being paid death pensions by the Canadian Pension Commission.....	594
Disability pensions being paid to Canadian merchant seamen by the Canadian Pension Commission.....	27
Persons benefiting by merchant seamen pensions (not including detention allowance for prisoners of war):	
Adults.....	387
Children.....	234
	<hr style="width: 10%; margin-left: 0;"/>
	621

WOMEN

THE BATTLE DRESS of Canadian women ranges from house dresses and business suits to overalls and service uniforms.

The number of women engaged directly or indirectly in war industry has increased from 95,000 in February, 1942, to 255,000. In the fiscal year ending March 31, 1944, war industries are expected to use 60,000 more women, and the armed forces an additional 24,000. It is anticipated these additional women will have to be obtained from the natural increase in population—about 60,000 a year—and from housewives and others not working in urban areas.

In the 12 months to June, 1943, about 426,152 women were placed in jobs by government employment offices.

The youngest women's service organized to release men to more active duties, the Women's Royal Canadian Naval Service, had attested 3,104 officers and ratings, and called up 2,396 by June 26, 1943, one year after its establishment.

Officer members of the W.R.C.N.S. now will hold the same rank titles as men in the R.C.N.

and will be referred to as commander, lieutenant-commander, lieutenant and sub-lieutenant instead of the previous counterpart, chief officer, first officer, second officer and third officer. The Canadian Women's Army Corps was the first women's service to use the same rank titles as men.

Formed in September, 1941, the Canadian Women's Army Corps has enlisted more than 11,500.

The first women's service, established in July, 1941, the Royal Canadian Air Force (Women's Division) had enlisted more than 12,300 by the end of June.

Women in nursing services uniforms totalled more than 2,414 at the end of June, with more than 1,714 in the Royal Canadian Army Medical Corps, 276 in the R.C.A.F. nursing service and 169 in the Canadian Navy nursing service. There are also about 255 Canadian nurses serving with the South Africa military nursing service. There are 37 women doctors in the armed services, four in the navy, 21 with the army, and 12 with the air force.

CANADIAN WOMANPOWER

Women over 14 years of age in Canada.....		4,240,000
Women in industry (at Jan. 30, 1943).....		1,152,000
Engaged directly or indirectly in war industry.....	Approximately	255,000
Engaged in other industry (at Jan. 30, 1943).....		936,000
Farm women (at Jan. 30, 1943)....		830,000
Women students (at Jan. 30, 1943).....		309,000
Other women, including non-farm housewives (at Jan. 30, 1943)		1,629,000
Considered unemployable.....		300,000
In the armed services.....	More than	29,355
W.R.C.N.S.....	" "	3,104
C.W.A.C.....	" "	11,500
R.C.A.F. (W.D.).....	" "	12,300
Nursing services.....	" "	2,414
Female doctors in the armed services.....	" "	37

The war emergency training program of the federal Department of Labor, inaugurated in July, 1940, had enrolled 33,722 women by the end of May, 1943. More than 25,000 had completed training then. During May, 1,415 persons enrolled for full-time training in the 124 industrial centres, and 552 of these were women.

On May 31 there were in training: 798 women in full-time and 440 in part-time industrial centre classes; 674 in full-time and 64 in part-time plant school classes.

Industry itself commenced

giving training under the government program April 1, 1942, and 92 plant schools had been approved by May 31, 1943. By this date 6,358 women had enrolled for full-time training and 939 for part-time.

By development of the Dominion-provincial plan for day care of children, increased assistance is being given in Ontario and Quebec to mothers who desire to take up war work.

Under the equal-cost agreement, 18 wartime day nurseries had been approved, and 16 were

in operation by the end of June.

Sixteen school projects have been approved under the day care plan with the assistance of the Ontario board of education. Women volunteers provide the major part of the staffs for child-care projects under the Dominion-provincial plan.

During the last 15 months the work of women volunteers has been co-ordinated under the direction of the women's volun-

tary services division of the federal Department of National War Services, and 27 voluntary service centres have been established to prevent overlapping of national and local volunteer work. The W.V.S. centres are being used at present to arrange demonstrations on canning in the interest of food conservation under the direction of the federal Department of Agriculture.



AID TO UNITED NATIONS

CANADA'S UNITED NATIONS Mutual Aid Bill, passed in May, 1943, provides for the distribution of Canadian war equipment, raw materials and foodstuffs to the United Nations to the value of \$1,000,000,000 on the basis of "strategic need." Following last year's \$1,000,000,000 gift to Britain, it gives Canada direct responsibility and credit for its contributions of war supplies. The bill sets up a board, composed of five cabinet ministers, which decides where the munitions and supplies are to be sent.

Effective use in the prosecu-

tion of the war of Canadian war supplies purchased with the \$1,000,000,000 is good and sufficient consideration for transferring these war supplies to any of the United Nations, but whatever reciprocal arrangements are practicable may be entered into. Canada's allies will furnish Canada with supplies or services in return if they can, or they will ensure the return after the war of any supplies or equipment which appear to have a post-war use. Where any terms and considerations are provided for besides strategic need, these will be clearly specified at the time of

transfer. There will be no piling up of huge war debts by the sale of supplies to the United Nations for payment after the war or the institution of indefinite and uncertain post-war obligations.

To prevent financial considerations obstructing an uninterrupted flow of Canadian war supplies and food to Britain, Canada in the past instituted the following specific measures:

1. After Britain had sold gold and used up its Canadian dollar resources in the purchase of war supplies and food from Canada, Canada proceeded to buy back before maturity Canadian government direct and guaranteed securities held in the United Kingdom. Financial assistance up to the time the \$1,000,000,-000 gift came into operation amounted to \$1,518,000,000.

2. Canada took payment in pounds sterling and thus accumulated balances in London.

3. At the beginning of 1942 Canada extended a program of financial aid which included:

(a) the repatriation of all remaining Dominion

government and Canadian National Railways securities amounting to approximately \$295,-000,000;

- (b) the consolidation of the major part of accumulated sterling balances, amounting to \$700,000,-000, into an interest-free loan for the duration of the war;
- (c) a direct gift of \$1,000,-000,000 in munitions, raw materials and food-stuffs.

The governments of the United Kingdom and Canada thus began the 1942-43 fiscal year with clear-cut financial arrangements. Speaking of these measures, Finance Minister Ilsley stated:

"They will put our financial arrangements on a clear and sensible basis, fully in accord with the realities of the war situation. They will prevent the accumulation of a huge, unmanageable war debt with all the dangers that would involve of post-war misunderstanding and difficulties. And they will reflect the determination

of this nation to contribute everything possible to the general cause."

4. When the \$1,000,000,-000 gift to Britain was entirely used up by December, 1942, it was necessary to find some other means of keeping Canadian supplies moving to the United Kingdom and the other United Nations.

The United Nations Mutual Aid Bill was introduced early in 1943. To tide Britain over the period before the new measure came into operation, the Canadian government bought outright all British war plant investments in Canada amounting to about \$200,000,000. Canada also undertook payment of the entire cost of pay, allowances, maintenance and equipment of the R.C.A.F. squadrons operating overseas and pay, allowances and maintenance of R.C.A.F. personnel in the R.A.F. The additional cost of this undertaking over and above Canada's 1942 commitments on that account is about \$363,000,000. This means that with that much more money Britain can purchase war materials and supplies in Canada, and there will be a

corresponding decline in the extent to which Britain in 1943 will depend on mutual aid.

Sterling area purchases and other payments in Canada during the period of use of the \$1,000,000,000 gift were, in millions of dollars:

A. Portion attributed to the gift:	
(1) Munitions..	689
(2) Foodstuffs and raw ma- terials.....	311
	1,000 (*)

(*) Of this total, supplies to the value of \$61,000,000 are known to have been transferred to Russia, and mechanical transport valued at \$71,000,000 to Australia, New Zealand and other parts of the sterling area.

B. Remaining portion attributed to other sources of financing:

(1) Commodity exports	
(a) To the United Kingdom.....	140
(b) To the sterling area other than the U.K.....	79
	219
(2) Services, etc.....	221
	440

On May 11 Prime Minister King announced that a protocol setting forth the munitions, war materials and essential supplies to be furnished to the Union of Soviet Socialist Republics by the United States, the United Kingdom and Canada during the year beginning July 1, 1943, was being negotiated, with Canada a direct party to the protocol. Hitherto the supplies which have gone to Russia from Canada have been included in the commitments made by the United Kingdom or in some cases by the United States. Of the \$1,000,-000,000 gift to Britain last year, supplies to the value of \$61,000,-000 were transferred to Russia.

Canada has sent Russia more than 1,400 Canadian tanks, more than 2,000 Canadian universal carriers, Canadian naval guns and Canadian Bren guns and anti-tank rifles, as well as ammunition for heavy guns and small arms. In addition, to Russia have gone machine tools, boots, gloves, textiles, clothing and personal equipment and large shipments of the five metals most urgently required for the Russian war program.

Canada also has extended a \$10,000,000 credit to Russia

covering purchases of Canadian wheat and flour. More than \$1,000,000 has been contributed to the Canadian Red Cross for Russian relief. More than \$3,-000,000 has been contributed to the Canadian Aid to Russia Fund.

To the United States Canada has been shipping war materials such as components of various munitions, ammunition, secret electrical devices and base metals. These transactions are handled by a government company, War Supplies Limited.

Arms sent to China include 25-pounder guns, Bren and Boys guns, rifles and ammunition for these weapons. It is expected that many additional types of equipment will be shipped, now that the Mutual Aid Board is operating. Up to January 27, 1943, the Canadian Red Cross sent to China cash and medical supplies valued at \$199,956. The Chinese War Relief Fund sent \$122,303 in cash, and the Friends of China approximately \$10,000. The total of \$332,259 has been greatly increased during the current year, particularly by cheques presented to Madame Chiang Kai-shek during her visit to Ottawa, when the Chin-

ese War Relief Fund donated \$177,000, the Canadian Red Cross \$100,000, and the Junior Canadian Red Cross \$10,000.

Canada has given to Greece 5,476,211 bushels of wheat. Fifteen thousand tons of wheat go regularly every month to Greece as a gift of the Canadian people. More than \$93,000 worth of medical supplies have been provided by the Greek War Relief Fund. The 1943 drive for the Greek War Relief Fund passed its objective of \$500,000.

A draft agreement for a United Nations relief and rehabilitation administration framed by the governments of the United States, the United Kingdom, the Soviet Union and China was tabled June 18 by Prime Minister King, who stated that Canada is prepared to play its full part in international relief.

CONTROLS

WARTIME CONTROLS IN CANADA are administered chiefly by the following departments, each represented by a minister of the government, who is responsible to the people of Canada through Parliament:

The Wartime Industries Control Board, Department of Munitions and Supply, is responsible for the supply and allocation of all materials essential for war needs.

The Wartime Prices and Trade Board, Department of Finance, has supreme authority in the field of price control and consumer rationing.

National Selective Service, Department of Labor, is responsible for the allocation of manpower to the armed forces, agriculture and essential war industry. (See separate section on Manpower.)

The National War Labor Board administers government regulations on wages control and also regulations on the cost-of-living bonus.

The Foreign Exchange Control Board, Department of Finance, has control over all financial transactions between residents of Canada and other countries.

The Wartime Prices and Trade Board was constituted under the War Measures Act, September 3, 1939, "to provide safeguards under war conditions against any undue advancement in the price of food, fuel and other

necessaries of life, and to ensure an adequate supply and equitable distribution of such commodities."

The responsibility of the Wartime Prices and Trade Board for policing individual prices was broadened in December, 1941, when the government made the board responsible for the maintenance of the over-all price ceiling, which was established to prevent inflation.

Then the cost-of-living index showed a percentage advance of 14.9 above the pre-war level. The December, 1942, index, after 12 months of price ceiling, showed a cost-of-living advance of only 2.6%.

To stabilize the cost-of-living, prices of certain food commodities were lowered in December, 1942, by the reduction of duties and taxes and payment of subsidies.

The Commodity Prices Stabilization Corporation, a crown company acting under the direction of the Wartime Prices and Trade Board, pays the subsidies. From September 3, 1939, to March 31, 1943, import and do-

mestic subsidies totalled \$65,161,507, of which the food group accounted for \$28,539,041, or almost half. It is estimated that consumers' subsidies to be paid during the fiscal year ending March 31, 1944, will amount to \$120,000,000.

Commitments to Great Britain, the needs of the armed forces, transportation difficulties and shipping losses have necessitated consumer rationing which ensures an equitable distribution of the necessities of living. Each Canadian is entitled to the following rations:

TEA.....one ounce weekly,
COFFEE....four ounces weekly.

(The tea and coffee ration is not available to children under 12).

SUGAR....half a pound weekly
(plus special seasonal allowance to housewives for canning).

BUTTER....half a pound weekly.

MEAT....one to two and a half pounds weekly according to type of meat.

GASOLINE.non-essential passenger cars—40 coupons a year; essential and commercial vehicles—ration tailored to meet individual needs. (Unit as at June, 1943 = 3 gallons).

To help control volume of purchasing power, as well as production costs, both of which in-

fluence prices, wages and salaries in Canada were stabilized late in 1941. To adjust wages to wartime price levels, however, every employer, except in a few exempted classes, must pay a bonus to employees below the rank of foreman. This bonus varies with each point change in the adjusted cost-of-living index (August, 1939 = 100) as announced every three months by the National War Labor Board. The bonus was increased July 2, 1942, when the adjusted index rose to 117.0. Since that date there has not been a quarterly point change in the index. At April 1, the time for quarterly reckoning, the index was 116.7.

The bonus payment is as follows: 25c for each point rise in the cost of living for all adult male employees and for all other employees employed at basic wage rates of \$25 or more a week; one per cent of their basic weekly wage rates for male employees under 21 and women workers employed at basic wage rates of less than \$25 a week.

The industrial division of the W.P.T.B. aids industry in distributing the price-ceiling "squeeze" and in eliminating "frills" to conserve manpower, materials and machinery.

CANADA-U.S. CO-OPERATION

IN THE FIELDS OF DEFENCE, economics and war production Canada and the United States have joined forces through the following committees:

Permanent Joint Board on Defence
Materials Co-ordinating Committee
Joint Economic Committees
Joint War Production Committee
Joint Agricultural Committee

Canada is also a member of the Combined Resources and Production Board with Great Britain and the United States.

On August 17, 1940, at Ogdensburg, New York, Canada and the United States signed the agreement on which co-operation in defence is based.

Recommendations of the defence board have resulted in the construction of a chain of air bases between Edmonton and Alaska and the Alaska Highway.

Establishment of the Materials Co-ordinating Committee was announced May 1, 1941. Through sub-committees on forest products, copper, zinc and ferro-alloys, the movement of primary materials between the two countries is promoted, avail-

able supplies are increased and information exchanged on raw material stocks, production and consumption in the United States and Canada.

The Joint Economic Committees were formed in June, 1941, to act in an advisory capacity to the governments at Ottawa and Washington on foreign exchange control, economic controls, price policies, tariffs and duties and post-war planning.

At Hyde Park, New York, on April 20, 1941, the Prime Minister of Canada and the President of the United States agreed "as a general principle that in mobilizing the resources of this continent, each country should provide the other with the defence articles which it is best able to produce, and, above all, produce quickly, and that production programs should be co-ordinated to this end."

According to what is known as the Hyde Park Declaration, the United States agreed to buy enough Canadian war goods to enable Canada to pay for essential U.S. war materials.

This measure has proved effec-

tive, and Canada now is paying to a large extent for imports by the sale of war supplies to the United States. At present, by economizing in non-essential expenditures of United States dollars, Canada has a small surplus on civilian or non-war account with the United States.

Canada does not use lend-lease accommodation utilized by other United Nations.

There has been no relaxation in foreign exchange control, which prevents Canadians from obtaining United States currency in Canada for pleasure travelling in the United States.

Formation of the Joint War Production Committee was announced November 5, 1941. The duty of this committee is to reduce duplication, arrange uniform specifications and quick exchanges of supplies, break transportation bottlenecks and exchange information. Ten technical sub-committees carry out the work of the committee.

The Joint Agricultural Committee was set up in March, 1943, to keep agricultural and food production and distribution

in Canada and the United States under continuing review in order to further such developments as may be desirable in reference to those phases of wartime agricultural and food programs that are of concern to both countries.

To co-ordinate policies of food production, and to supervise the preparation of information on Canada's food position, the government has set up the Food Requirements Committee, which works closely with the Combined Food Board of the United

Kingdom and the United States.

An exchange of notes, concluded on November 30, 1942, embodied an agreement setting forth the principles which will guide the governments of the United States and Canada and other like-minded governments in approaching the problem of post-war economic settlements.

Canada is manufacturing \$1,-000,000,000 of war material and equipment for the U.S.



A. R. P.

AS OF JUNE 10, 1943, 649 communities in Canada had organized for civilian defence under the jurisdiction of provincial air raid precautions committees,

which are established through the federal government's director of civil air raid precautions. The enrolment in A.R.P. primary defence areas is as follows:

Officers.....	3,814
Control centres, clerical staffs, etc.....	2,178
Wardens' services.....	111,060
Auxiliary police services.....	11,852
Auxiliary fire services.....	16,478
Medical services (doctors, first aid workers, trained nurses, stretcher bearers, etc.).....	51,675
Engineering services (bomb reconnaissance, rescue, gas decontamination, demolition squads, etc.)..	20,710
Transportation services.....	9,965
Miscellaneous (disaster relief, telegraphers, etc.)...	9,787
TOTAL.....	247,028
Number of women.....	50,671
Number of communities in which A.R.P. organizations have been set up.....	649

FINANCE



THE COST OF WAR to Canadians in the three years and seven months to March 31, 1943, totalled more than \$6,000,000,000, equal to nearly twice the net debt with which the Dominion government entered the war in 1939.

In the current fiscal year

which ends March 31, 1944, it is expected \$4,890,000,000 will be spent for war, including \$1,000,000,000 of war supplies, equipment and food to be given to the United Nations.

Following are Dominion government expenditures and revenues since 1939:

	1939-40	1940-41	1941-42	1942-43	1943-44
	— Millions of Dollars —		(Estimated)		(Budget)
War Expenditures:					
Army.....	68	383	511	1,078	1,787
Navy.....	11	88	129	208	489
Air Force.....	33	176	371	627	1,129
Dept. of Munitions and Supply.....	...	80	253	689	166
War Services Dept..	...	2	3	9	12
Miscellaneous Depts.	6	23	73	192	307
U.K. financial assistance (budgetary). . . . .	...	....	....	1,000*	1,000**
TOTAL WAR.....	118	752	1,340	3,803	4,890
Other Govt. Expenditures.....	563	498	545	667	610
TOTAL EXPENDI- TURES.....	681	1,250	1,885	4,470	5,500
TOTAL REVENUES	562	872	1,489	2,208	2,527
Over-all deficit.....	119	378	396	2,262	2,973
Total revenue to total expenditure.	82%	70%	79%	49%	46%
U.K. financial assistance (non-budgetary)*.....	104	361	1,053	....	....

* Financial assistance in 1942-43 provided for in budget and included in war costs. In previous years assistance was provided outside the budget as it involved investment or debt redemption rather than expenditures.

** Mutual Aid Bill to provide war supplies, equipment and food to the United Nations.

So far as possible the Canadian government has met the costs of war by pay-as-you-go methods. Rates of personal income taxes have been raised to record high levels, and the persons paying have been broadened from 250,000 in 1939 to more than 2,000,000 at present.

Minimum rate of tax on corporations is 40% of profits, and the rate on excess profits is 100%, of which 20% is refundable after the war.

Beginning with the first payroll in April income tax payments were placed on a pay-as-you-owe basis, and the lag between the period in which the liability was incurred and payment made was eliminated. Income tax payments are now deducted from pay envelopes or collected in quarterly instalments. In making the adjustment in payments, 50% of the tax liability on 1942 income was wiped out.

A part of the income tax payments represents a minimum savings portion, which will be refunded to the taxpayer after the war, with interest at 2% annually.

FOOD

CANADA'S FARM ECONOMY is geared to produce more food than the Canadian people require for domestic use. The war has been the means of showing what Canadian farmers can do in the way of record-shattering output when given the "full speed ahead" signal, and this record production has been attained in the face of wartime shortages of labor and farm equipment.

The gross value of Canadian agricultural production, estimated at more than \$2,000,000,000 in 1942, has reached its highest point since the inflationary year of 1919—and Canada in this war has controlled inflationary trends by a policy of price control.

On May 18, delegates from the United and Associated Nations convened at Hot Springs, Virginia, to study methods of freeing the peoples of the world from want once the Axis powers have been defeated. World plans for production, nutrition and distribution were studied, and the conference approved a declaration and some 30 resolutions at its concluding session on June 3.

A brief general statement on the work of the conference and the program for future action was presented in the House of Commons on June 14 by Prime Minister King, who characterized the conference as "an act of faith in the continuing solidarity of the United Nations."

Mr. King said:

"The conference recognized that there had never been enough food produced in the world to maintain the health of all its peoples. The development of the science of nutrition has added greatly to the knowledge of the kinds of food needed to maintain health and efficiency. The nutrition experts who were gathered at the conference set the goals for the achievement of better standards of health and indicated various measures which might be taken to that end, particularly the provisions of protective and other nutritionally desirable foods. The problem to be faced was stated by the conference to be that of ensuring the production of the necessary food and having it made available to the consumer. The primary emphasis in all the studies

made by the nutrition experts, and the basic conclusion of the conference itself was that the production of food must be increased if freedom from want is to be achieved."

The conference also recognized that the general welfare would be promoted by ensuring to the producers of food a reasonable return for their labor. The delegates therefore considered measures to increase the purchasing power of agriculturists generally and, more particularly, of the less advanced and less favored peoples. A main conclusion reached was that the expansion of agricultural production must be part of the expansion of the whole world economy.

The Prime Minister stated:

"It was recognized that if markets are to be opened for an expanded food production, and if people are to be able to buy the food which they need, poverty must be made to disappear. The increasing of industrial production, the provision of full employment, the prevention of exploitation, the development of social legislation, the orderly management of currencies and invest-

ments, the fostering of international trade through the reduction of trade barriers, were seen to be problems to be considered if the purposes of the conference on food and agriculture were to be realized."

To facilitate collaboration among nations in this field of endeavor, the conference recommended that a permanent international organization on food and agriculture be established. It suggested that each government represented at the conference appoint a representative to an interim commission, the duty of which would be to carry out the recommendations of the conference and to prepare a specific plan for a permanent

international organization on food and agriculture. The conference invited the President of the United States to arrange for the establishment of this interim commission and for the calling of an early meeting.

Mr. King stated:

"The President associated himself with the declaration of the conference that every nation should assume the responsibility, in collaboration with others, of providing adequate food for its own people. I am prepared to make at once a similar declaration on behalf of Canada."

During the calendar year 1942 shipments from Canada to the United Kingdom included the following:

Commodity	Unit of Quantity	Quantity	Value
Wheat.....	Bush.	90,086,714	\$77,518,820
Oat meal and rolled oats.....	Cwt.	272,141	1,086,486
Flour of wheat.....	Brl.	4,666,781	20,742,992
Herring, sea, canned.....	Cwt.	493,367	4,414,994
Salmon, canned.....	Cwt.	738,518	13,860,849
Bacon and hams.....	Cwt.	5,249,519	99,723,878
Canned meats.....	Lb.	5,681,112	1,491,462
Cheese.....	Cwt.	1,313,740	24,558,965
Fish oil.....	Gal.	179,033	1,058,408
Eggs, dried.....	Lb.	7,661,817	7,733,195
Eggs in the shell....	Doz.	4,374,640	1,367,900



VOLUNTARY AND AUXILIARY SERVICES

UNDER THE DIRECTION of the voluntary and auxiliary services division of the federal Department of National War Services 70 citizens' committees have been organized in Canada to co-ordinate volunteer efforts.

The division has three chief functions:

(1) To supervise about \$7,000,000 annually provided by the government for auxiliary service activities in the three armed services.

(2) To co-operate with the directorate of auxiliary services of the Department of National Defence and with citizens' committees and volunteer bureaus in their work.

3. To administer the War Charities Act under which all groups desiring to appeal to the public for funds for war purposes must register.

The individual collection of war purpose funds of the Canadian Legion, Salvation Army, Knights of Columbus, Y.M.C.A. and Y.W.C.A. was discontinued, and their war service

activities were subsidized from January 1, 1942, by the federal government. The purpose was to eliminate possible interference with government war financing.

SALVAGE

COLLECTION OF SALVAGE MATERIALS for the use of war industries is becoming an increasingly important function of the national salvage division of the Department of National War Services. The number of voluntary salvage committees is 1,700. During the 25 months from May 1, 1941, to May 31, 1943, 73% of these committees collected 348,344,384 pounds as follows:

Province	Materials (lbs.)	Lbs. per Marketed	Population
P.E.I.....	2,620,917	27,588	
N.S.....	7,010,844	12,129	
N.B.....	8,144,133	17,821	
Que.....	58,397,637	17,526	
Ont.....	177,784,412	46,933	
Man.....	35,312,485	48,373	
Sask.....	15,347,920	17,130	
Alta.....	19,572,854	24,589	
B.C.....	24,153,182	29,527	
TOTAL...	348,344,384	30,317	

Among materials most urgently needed are fats and bones to produce glycerine for munitions plants. By May 31, 8,339,731 pounds had been collected.

JUNE HIGHLIGHTS

- June 1. Honors and decorations announced for 625 Canadians in the King's birthday honors list, 285 for civilians and 340 for the armed forces.
- Defence Minister Ralston reports there are less than 25,000 aliens in the Canadian Army, and of these less than 2,500 had their origin in enemy countries.
- June 2. Prime Minister King puts Canada on record as holding the view that the Munich agreement of 1938, under which Czechoslovakia ceded part of its territory to Germany, is void.
- June 3. Agriculture Minister Gardiner announces the Canadian Bacon Board has been reconstituted as a meat board with power to control distribution of all meat.
- June 4. The Dominion Bureau of Statistics reports the official cost-of-living index advanced from 117.6 to 118.1 during April
- June 6. The director of National Selective Service reports approximately 900 men have been moved to more essential jobs as a result of compulsory transfer orders, and about 9,000 men have registered under the orders.
- June 7. Naval Headquarters announces that four destroyers acquired by the R.C.N. as a gift from the British government are on convoy duty in the North Atlantic; Canadian naval strength has increased 36 times, and personnel 34 times since the beginning of the war.
- Stating that the national debt can be repaid if present financial policy is continued, the Department of Finance traces in a tabled return the growth of the gross national debt from \$96,896,666 in 1868 to a budget estimate of \$8,893,140,000 in 1943.
- June 8. Prime Minister King announces a new system of civilian defence is being set up in the area of the St. Lawrence River and Gulf, and Squadron Leader Paul Desloges, 30, of Ottawa has been appointed defence co-ordination officer in the Gaspe and Lower St. Lawrence area.
- June 11. Agriculture Minister Gardiner tells the House 30,000 male farm workers left the farms in the year ending March 1, 1943, compared with 90,000 in the previous year.
- June 12. Ontario's highways minister announces the Trans-Canada Highway is open from coast to coast now that the last link of 153 miles from Geraldton to Hearst in Northwestern Ontario is completed.
- June 14. Prime Minister King announces that the redistribution of representation in the Canadian Parliament required by the British North America Act after each decennial census is to be postponed until after the war.

JUNE HIGHLIGHTS—Continued

June 16. Mme. Chiang Kai-shek addresses a joint session of the Canadian Senate and House of Commons, marking the first time a woman other than a member of Parliament has addressed Canadians from the floor of the House.

Munitions Minister Howe announces arrangements have been completed for establishment of a Canadian government wartime trans-Atlantic air service to carry mail to and from the Canadian armed forces in the British Isles and to transport members of the forces and government officials.

Mr. Howe tells the House that all the rubber Canada needs for war and all it is likely to need after the war will be made at the government-owned plant in Sarnia, Ontario, which should be in full operation by November.

June 17. Finance Minister Ilsley reports in Toronto that Canadians had bought more than \$77,000,000 worth of war savings certificates in the last 12 months, but during the same period \$24,000,000 worth have been redeemed.

June 18. Prime Minister King tables in the House the draft agreement for establishment of a United Nations relief and rehabilitation administration.

June 19. The Dominion Bureau of Statistics reports the census of 1941 showed 49.7% of the population is of British descent; 30.3% French; 17.8% other European; 6% Asiatic, and 1.1% Indian and Eskimo.

The 500,000th unit of mechanized transport produced by the automotive industry of Canada since war began is driven off the assembly line by Munitions Minister Howe.

June 21. Two members of the Russian Peoples' Commissariat arrive in Ottawa after flying from Moscow by way of Siberia and Alaska—to negotiate transfer to Russia of Canadian-made supplies under Canada's \$1,000,000,000 Mutual Aid Plan.

June 22. Munitions Minister Howe states that a plant at Haley Station, Ontario, is supplying all of Canada's magnesium needs, with some for export.

June 23. Labor Minister Mitchell gives a detailed report on the manpower situation. He announces that youths of 16, 17 and 18 years are now subject to compulsory transfer orders in the same manner as men in the age groups liable for military service.

June 24. Fisheries Minister Bertrand announces Canada, under arrangements made between the Canadian and British governments, will supply the United Kingdom with 9,000,000 pounds of frozen fish during 1943—more than twice the amount sent in 1942.

June 26. R.C.A.F. headquarters announces a proposal to establish a winter experimental and training flight station at Kapuskasing, Ontario.

INDEX



A

Agriculture.....	56
Aid to China.....	49
Aid to Greece.....	50
Aid to Russia.....	49
Aid to United Nations.....	46
Aid to United States.....	49
Aircraft.....	31
Aircraft Detection Corps.....	3
Aircraft Overhaul.....	32
Air Force.....	19
Air Raid Precautions.....	54
Air Training.....	23
Ammunition.....	26, 28
Area.....	63
Armed Forces.....	10
Army.....	15
Auxiliary Services.....	59

B

Benefits for Servicemen.....	5
British Commonwealth Air Training Plan.....	23

C

Canada-United States.....	52
Chemicals.....	28
Civilian Defence.....	54
Commodity Prices Stabilization Corporation.....	51
Communications Equipment.....	31
Controls.....	50
Convoy.....	10, 22
Cost of Living Bonus.....	52
Cost of Living Index.....	51, 52

D

Day Nurseries.....	45
Dieppe.....	18

E

Expenditures.....	55
Explosives.....	28
Exports.....	8

F

Finance.....	55
Food.....	56
Foreign Exchange Control Board.....	50
Form of Government.....	63

G

Guns.....	29, 30
-----------	--------

H

Hyde Park Agreement.....	53
--------------------------	----

I

Imports.....	8
Industrial Training.....	45
Instruments.....	31

M

Manpower.....	39, 40
Merchant Seamen.....	43

M (Contd.)

Metals.....	36
Mobilization Statistics.....	41
Motorized Equipment.....	30
Munitions.....	26
Mutual Aid Bill.....	46

N

National Selective Service.....	39, 50
National War Labor Board.....	50
Naval Equipment.....	30
Naval Guns.....	30
Navy.....	10
Nurses.....	44

O

Ogdensburg Agreement.....	52
---------------------------	----

P

Population.....	63
Price Ceiling.....	51
Provinces.....	63

R

Rationing.....	51
Rehabilitation Benefits.....	5
Revenues.....	55
Royal Canadian Air Force.....	19
Royal Canadian Navy.....	10
Rubber.....	34

S

Salvage.....	59
Seamen.....	43
Selective Service.....	39, 50
Shipbuilding.....	32, 33
Small Arms.....	29
St. Lawrence Defences.....	3
Steel.....	35
Subsidies.....	51

T

Tanks.....	31
Taxation.....	56
Timber.....	34
Trade.....	8, 63

U

United Nations Aid.....	46
United Nations Relief.....	50

V

Veterans' Guard.....	16, 17, 18
Voluntary Services.....	59

W

War Costs.....	55
War Declarations.....	63
Wartime Industries Control Board.....	50
Wartime Prices and Trade Board.....	50
Women.....	44
Women's Army Corps.....	17, 44
Women's Division (R.C.A.F.).....	21, 44
Women's Royal Canadian Naval Service.....	44
Women's Voluntary Services.....	46

★ CANADA ★

AREA—3,694,863 square miles. POPULATION—11,500,000. CAPITAL—Ottawa. PROVINCES—Prince Edward Island, Nova Scotia, New Brunswick, Quebec, Ontario, Manitoba, Saskatchewan, Alberta, British Columbia. FORM OF GOVERNMENT—Since the passing of the Statute of Westminster of 1931, Canada has been a fully self-governing nation, freely associated with other members of the British Commonwealth of Nations and united with them by a common allegiance to the Crown. The actual government of Canada consists of the Prime Minister and the other members of the Cabinet, who are appointed by the Governor-General, the personal representative of the Crown, on the Prime Minister's recommendation. All the members of the Cabinet are members of one of the Houses of Parliament, almost always the House of Commons. The Cabinet is responsible to the House of Commons and must have the confidence of that House. The upper house, the Senate, has 96 members appointed for life by the Governor-General on the recommendation of the Government. The House of Commons has 245 members, elected by popular vote. The present Prime Minister is the Rt. Hon. W. L. Mackenzie King. Legislative jurisdiction is divided between the provincial legislatures and the federal Parliament.

DECLARATIONS OF WAR—September 10, 1939, Germany; June 10, 1940, Italy; December 7, 1941, Finland, Rumania, Hungary, Japan.

TRADE—Canada produces large surpluses of many agricultural, forest and mineral products and of hydro-electric power. Total trade (excluding gold): 1933, \$936,698,100; 1940, \$2,275,168,311; 1941, \$3,089,246,191. In 1942 total value of exports and imports exceeded \$4,000,000,000.

UNITED NATIONS—Canada was one of 26 nations signing the Declaration by the United Nations on January 1, 1942, at Washington, endorsing the principles and purposes embodied in the Atlantic Charter.



Jim Carson

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